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Cc: [Hartzell, Sharon](#); [Racaniello, Vincent](#); [Remien, Jason](#); [Dorsch, William R](#); [Granzen, Gerald \(BHSO\)](#)
Subject: Follow-up to Dec 2nd IAG Teleconference
Date: Tuesday, January 4, 2022 10:22:14 AM
Attachments: [CF FF PFAS Final Design Plans 040121.pdf](#)
Importance: High

Brian,

As a follow-up to your request during the December 2nd IAG teleconference, Vinnie put together the below project description followed by the approximate cost for the project. Since we reused a significant amount of infrastructure it is hard to provide more accurate costs. Our best estimate of that cost savings is highlighted in yellow at the bottom.

The design plans are attached in case you want to reference them.

Please let us know if you have any questions.

Thanks Bob

The following is a summary of the costs for the two PFAS groundwater remediation projects at BNL:

General Project Description:

In general, work consists of, but is not limited to, construction of 11 new groundwater extraction wells with submersible well pumps, (monitoring well installations, by others) below grade vaults for the extraction wells with new buried non-potable water piping, electric and controls. All work will take place on BNL property. This work is new construction but utilizes some existing equipment and infrastructure from the HFBR Tritium Pump and Recharge System, and existing Building 492 (which formerly housed granular activated carbon (GAC) vessels for a supply well). The extraction wells will be tied into the existing electric on site where available, and two new control systems will be installed to support each area of the Current Firehouse and the Former Firehouse locations. The Former Firehouse work will allow for the utilization of the existing GAC vessels (from the HFBR System) to treat the groundwater prior to discharge to the existing RAV recharge basin. A new pre-engineered building will be constructed for housing the existing HFBR GAC vessels at the RAV basin. The Current Firehouse work will make use of existing Building 492 where new GAC vessels will be installed to treat the groundwater prior to discharge to the existing OU III recharge basin. The site work also consists of restoration of trenches through dirt, grass, gravel and paved areas. The majority of this work involves the wells, vaults and buried utility installation. The contract was structured to include plumbing and electrical work required as part of extraction well installations. This work is considered Davis Bacon covered work. The drawings and specifications are attached and provide detailed information on the requirements for this project.

Cost Information:

Base bid: \$5,221,000

83 monitoring wells: \$900,000

Carbon vessels (B492) \$300,00

Total direct costs: \$6,421,000

The cost savings estimated on this project includes the use of existing Building 492 that was previously used for GAC vessels, the reuse of the HFBR tritium GAC vessels and the water mains running to the carbon vessels. **Approximate cost savings due to use of existing infrastructure is \$1,500,000**

Total estimated cost without reuse of existing infrastructure would be approximately \$7,900,000.

These costs do not include construction project oversight or design.